

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11)

Catalog # ABO14897

Product Information

Application	WB, IF, ICC, FC
Primary Accession	P07437
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	203068
Other Names	Tubulin beta chain, Tubulin beta-5 chain, TUBB, TUBB5
Calculated MW	49671
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 2 µg/ml, Human Flow Cytometry, 1-3 µg/1x10 ⁶ cells, Human
Subcellular Localization	cytoskeleton
Tissue Specificity	Ubiquitously expressed with highest levels in spleen, thymus and immature brain.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Clone Names Immunogen	Clone: 2E11 A synthetic peptide corresponding to a sequence at the C-terminus of human Beta Tubulin, identical to the related mouse and rat sequences.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	Store at -20 °C for one year from date of receipt. After reconstitution, at 4 °C

for one month. It can also be aliquotted and stored frozen at -20 °C for six months. Avoid repeated freeze-thaw cycles.

Protein Information

Name	TUBB
Synonyms	TUBB5
Function	Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin.
Cellular Location	Cytoplasm, cytoskeleton
Tissue Location	Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

Background

Tubulin beta chain is a protein that in humans is encoded by the TUBB gene. This gene encodes a beta tubulin protein. This protein forms a dimer with alpha tubulin and acts as a structural component of microtubules. Mutations in this gene cause cortical dysplasia, complex, with other brain malformations 6. Alternative splicing results in multiple splice variants. There are multiple pseudogenes for this gene on chromosomes 1, 6, 7, 8, 9, and 13.

Images

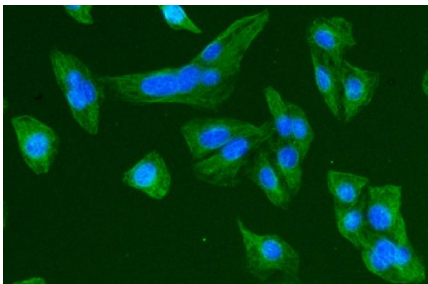


Figure 3. IF analysis of Tubulin beta using anti-Tubulin beta antibody (M05613-4). Tubulin beta was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 µg/mL mouse anti-Tubulin beta Antibody (M05613-4) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

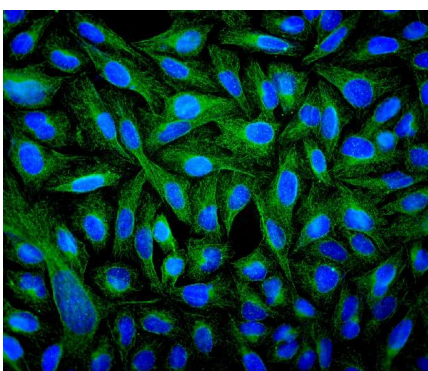


Figure 4. IF analysis of Tubulin beta using anti-Tubulin beta antibody (M05613-4). Tubulin beta was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 µg/mL mouse anti-Tubulin beta Antibody (M05613-4) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was

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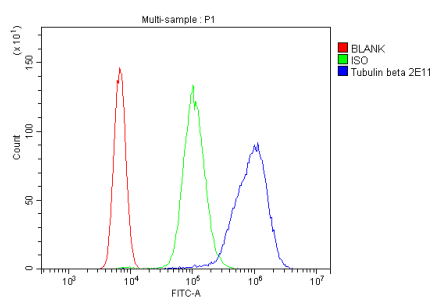


Figure 5. Flow Cytometry analysis of U937 cells using anti-Tubulin beta antibody M05613-4).

Overlay histogram showing U937 cells stained with M05613-4 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Tubulin beta Antibody (M05613-4, 1 μ g/ 1×10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 μ g/ 1×10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 μ g/ 1×10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

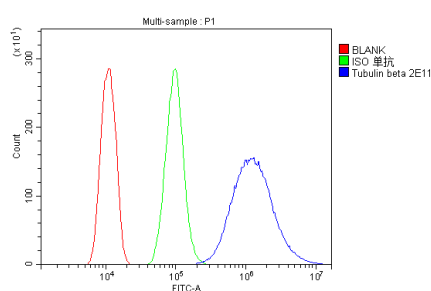


Figure 6. Flow Cytometry analysis of HEPA1-6 cells using anti-Tubulin beta antibody M05613-4).

Overlay histogram showing HEPA1-6 cells stained with M05613-4 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Tubulin beta Antibody (M05613-4, 1 μ g/ 1×10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 μ g/ 1×10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 μ g/ 1×10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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